

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A data recording apparatus comprising:

an inputting means-ofdevice for receiving a bit stream consisting of a packet signal string configured by data of a fixed length;

a data converting means-ofdevice for converting the data which is received by said inputting meansdevice, into a recording signal;

a recording means-ofdevice for recording the recording signal which is converted by said data converting meansdevice, on a predetermined recording medium;

a data rate detecting means-ofdevice for detecting a data rate of the received bit stream by counting a number of packets received by said inputting means-device at intervals of a predetermined time period, the predetermined time period being a time period taken by said recording means-device to record data on said predetermined recording medium in a predetermined format; and

a controlling means-ofdevice for controlling a recording rate of said recording means device based on the detected data rate,

wherein said controlling device compares a predetermined reference value with the data rate which is detected by said data rate detecting device, to control the recording rate of said recording device, and

wherein there are at least two kinds of recording modes in which said recording device records the recording signal, and

at intervals of a predetermined time period, until a rate of a data corresponding to the recording signal which is to be recorded by said recording device exceeds the predetermined reference value, said controlling device controls the recording rate of said recording device so that the recording signal is recorded in a recording mode corresponding to a rate which does not exceed the predetermined reference value, and, after the rate of the data corresponding to

the recording signal which is to be recorded by said recording device exceeds the predetermined reference value, controls the recording rate of said recording device so that the recording signal is recorded in a recording mode corresponding to a higher rate which exceeds the predetermined reference value.

2. (Currently Amended) A data recording apparatus according to claim 1, wherein said apparatus further comprises a special-data producing means~~of device for~~, from the data which is received by said inputting ~~means~~device, producing at least one or more kinds of special-reproduction data,

said recording ~~means~~device records also the special-reproduction data which is produced by said special-data producing ~~means~~device, and

said controlling ~~means~~device controls the recording rate in consideration of also an amount of the special-reproduction data which is produced by said special-data producing ~~means~~device.

3.-4. (Cancelled)

5. (Currently Amended) A data recording apparatus according to claim ~~2-or-4~~, wherein there are plural kinds of special-reproduction data, and

said apparatus further comprises a switching means~~of device for~~ switching the kinds of special-reproduction data which are produced by said special-data producing ~~means~~device.

6. (Cancelled)

7. (Previously Presented) A data recording apparatus according to claim 5, wherein the bit stream is a bit stream configured by a transport packet of an MPEG system of MPEG2 or higher, or a bit stream of a DSS system.

8.-9. (Cancelled)

10. (Currently Amended) A data recording apparatus according to ~~claim 9~~claim 1, wherein the predetermined reference value is a value which is determined in accordance with a rate of a head data of the recording signal which is to be recorded by said recording ~~means~~device, in each recording time period.

11. (Currently Amended) A data recording apparatus according to ~~claim 9~~claim 1, wherein ~~there are at least two kinds of recording modes in which said recording means records the recording signal, and~~

———~~at intervals of a predetermined time period, when a rate of a data corresponding to the recording signal which is to be recorded by said recording means~~device exceeds even once the predetermined reference value, said controlling ~~means~~device controls the recording rate of said recording ~~means~~device so that all recording signals during the predetermined time period are recorded in a recording mode in which a data of a rate exceeding the predetermined reference value can be recorded.

12. (Cancelled)

13. (Currently Amended) A data recording apparatus according to ~~claim 12~~claim 1, wherein the predetermined time period means a continuous recording time period, or a recording time period of bit streams of same contents.

14.-15. (Cancelled)

16. (Currently Amended) A data recording apparatus according to claim 1, wherein said recording ~~means~~device records also the recording rate on said recording medium.

17. (Currently Amended) A data reproducing apparatus comprising at least a reproducing means~~of device for~~, by using the recording rate which is recorded on said recording medium by a data recording apparatus according to claim 16, reproducing the recording signal which is recorded on said recording medium.

18. (Currently Amended) A data recording method comprising:

an inputting step of receiving a bit stream consisting of a packet signal string configured by data of a fixed length;

a converting step of converting the data which is received in said inputting step, into a recording signal;

a recording step of recording the recording signal which is converted in said converting step, on a predetermined recording medium;

a data rate detecting step of detecting a data rate of the received bit stream by counting a number of packets received in said inputting step at intervals of a predetermined time period, the predetermined time period being a time period taken in said recording step to record data on said predetermined recording medium in a predetermined format; and

a controlling step of controlling a recording rate in said recording step based on the detected data rate,

wherein, in said controlling step, a predetermined reference value is compared with the data rate which is detected in said data rate detecting step, to control the recording rate in said recording step, and

wherein there are at least two kinds of recording modes in which the recording signal is recorded in said recording step, and

at intervals of a predetermined time period, until a rate of a data corresponding to the recording signal which is to be recorded in said recording step exceeds the predetermined reference value, in said controlling step, the recording rate in said recording step is controlled so that the recording signal is recorded in a recording mode corresponding to a rate which does not exceed the predetermined reference value, and, after the rate of the data corresponding to the recording signal which is to be recorded in said recording step exceeds the predetermined reference value, the recording rate in said recording step is controlled so that the recording signal is recorded in a recording mode corresponding to a higher rate which exceeds the predetermined reference value.

19. (Original) A data recording method according to claim 18, wherein said method further comprises a special-data producing step of, from the data which is received in said inputting step, producing at least one or more kinds of special-reproduction data,

in said recording step, also the special-reproduction data which is produced in said special-data producing step is recorded on said recording medium, and

in said controlling step, the recording rate is controlled in consideration of also an amount of the special-reproduction data which is produced in said special-data producing step.

20.-24. (Cancelled)

25. (Previously Presented) A data recording method according to claim 18, wherein, in said recording step, also the recording rate is recorded on said recording medium.

26. (Previously Presented) A data reproducing method comprising at least a reproducing step of, by using the recording rate which is recorded on said recording medium by a data recording method according to claim 25, reproducing the recording signal which is recorded on said recording medium.

27.-34. (Cancelled)